

Ultrasonic Anemometer for Drones

» Product Introduction



HY-SA256E Wind Speed and Direction Sensor, based on the principle of ultrasonic resonance, is specifically designed for installation on small aircraft and unmanned platforms to monitor wind speed and direction at low altitudes.

Weighing approximately 56 g and measuring about 50 mm in diameter, this compact instrument features strong resistance to electromagnetic interference as well as waterproof and dustproof capabilities, and can operate normally at altitudes of up to 4,000 m and ambient temperatures ranging from -40 °C to +70 °C. Equipped with a low-power chip, it can measure wind speeds up to 60 m/s and is suitable for unmanned aerial vehicles (UAVs) and their flight control platforms, as well as environmental monitoring systems that utilize UAVs.

This instrument offers two mounting options: vertical mounting on top of the aircraft, or inverted mounting on the bottom of the aircraft.

» Technical Indicators

Parameters	Range	Accuracy	Resolution
Wind Speed	0–60 m/s	±3%	0.1 m/s
Wind Direction	0–359°	±3°	1°
Diameter	50 mm		
Height	50 mm		
Weight	56 g		
Digital Output	RS485		
Baud Rate	4800–115200		
Protocol	ModBus-RTU、ModBus-ASCII		
Operating Temperature/Humidity	-40 ℃～80 ℃；0–100%RH		
Working Altitude	0–4000 m		
Power Requirement	19mA@12–24VDC		
Installation Methods	Mounting on the top strut of the aircraft or suspension from the bottom		
Material/Color	ABS/Black		

» Applications

Drone-mounted low-altitude wind speed and direction measurement; wind speed measurement in narrow ducts; integrated handheld anemometer.





» Product Showcase



